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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,249	10/22/2003	Meng C. Hsieh	10390US01	5457

7590

05/02/2005

Attention: Eric D. Levinson
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Legal Affairs
P.O. Box 64898
St. Paul, MN 55164-0898

EXAMINER

RESAN, STEVAN A

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,249

Applicant(s)

HSIEH ET AL.

Examiner

Stevan A. Resan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-28-2004</u> . | 6) <input type="checkbox"/> Other: ____ |

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-10, 17-24 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is confusing since it claims a Tg "of the composite front side". It is not clear if this is the Tg of the magnetic layer, an average of any magnetic layers, an average of all layers on the front side, or some measured value.

Claims 3-5, 7, 9, 17-21, 23-24 contain the relative terms "hard" and "soft". However this is confusing since the claimed polyurethane resins may be "hard" or "soft" by applicants own claims (See claims 4 and 8 and claim 20). While applicants have selected "a hard resin" having a Tg of at least about 70 C and "a soft resin" with a Tg of less than about 60 C this does not define hard or soft. The examiner suggests deleting reference to these terms and define the resins only in terms of their glass transition temperatures or structure.

Claims 6,8,10, and 22 have been rejected for depending from claims rejected under 35 USC 112.

Claim 27 is confusing since it is not clear what the phrase "further comprises carbon black" means since carbon black is already required to be present in claim 26 from which claim 27 depends.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5-7,9-17,19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. US 6037037.

Kubota et al disclose a dual layer magnetic recording medium comprising a non magnetic substrate having a front and back side, at least one lower support layer formed over the front side and at least one magnetic upper layer formed over said at least one lower layer, said magnetic layer comprising magnetic pigment particles and a binder system. The binder system for the lower support layer has a Tg lower than the binder system for the magnetic upper layer.

Kubota et al teach that the magnetic particles of the magnetic layer may be in the range of 50-210 nm which overlaps applicants claimed range (Claim 8).

Kubota et al do not teach improvement in edge cracking. However If the chemical composition of the claimed article of manufacture recited in the claims is the same as the identical structure of the prior art, it is immaterial that the applicant recognized different advantages flowing therefrom than did the prior art. Ex parte Tummers et al. (POBA 1962) 137 USPQ 44, or that a claim thereto recites a property thereof not disclosed in the prior art. Titanium Metals Corp. of America v. Banner (CAFC 1985) 778 F 2d. 775, 227 USPQ 775.

The limitations of the dependent claims are taught by Kubota et al (See Col 2 lines 19-45; Col 3 lines 29-32; Col 5 lines 5-40; Col 7 lines 20-27; Col 8 lines 21-25; Examples.

It would have been obvious to one of ordinary skill in the art to vary within the ranges taught by Kobota et al to optimize results. Substitution of equivalents (i.e. resins, magnetic and non magnetic powders etc.) requires no express motivation as long as the prior art recognizes the equivalency. (i.e. the selection of equivalents from those listed by Kubota et al).

In re Fount 213 USPQ 532 (CCPA 1982); In re Siebentritt 152 USPQ 618 (CCPA 1967); Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co. 85 USPQ 328 (USSC 1950).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ***

Meguro et al US 5419943 is cited for teaching a magnetic recording medium having a magnetic layer with a glass transition temperature of 80 C to 100 C.

Miyoshi et al US 4504542 is cited for teaching that subbing layers having a glass transition temperature of 10 C to 60 C provide adhesive strength to a overlying magnetic layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



STEVAN A. RESAN
PRIMARY EXAMINER